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09/601,222	09/14/2000	Charles Coulier	032326-080	8563

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EXAMINER

ZAND, KAMBIZ

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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 09/601,222  
Filing Date: September 14, 2000  
Appellant(s): COULIER ET AL.

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James A. LaBarre  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed 01/03/2006 appealing from the Office actions mailed 03/15/2005, 08/30/2005 and 11/02/2005.

**(1) *Real Party in Interest***

A statement identifying the real party in interest is contained in the brief.

**(2) *Related Appeals and Interferences***

A statement identifying the related appeals and interferences, which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief.

**(3) *Status of Claims***

A statement of the status of the claims is contained in the brief.

This appeal involves claims 1, 2 and 4.

**(4) *Status of Amendments***

A statement identifying the status of amendments is contained in the brief.

**(5) *Summary of Claimed Subject Matter***

The summary of invention contained in the brief is correct.

**(7) *Grouping of Claims***

Group I: Claims 1, 2 and 4.

**(8) *Claims Appealed***

A substantially correct copy of appealed claims 1, 2 and 4 appears on pages 1 and 14 (Appendix) to the appellant's brief.

**(9) *Prior Art of Record***

The following is a listing of the prior art of record relied upon in the rejection of claims under appeal:

6,134,631	Jennings, III	10-2000
6,216,014	Proust et al.	04-2001
5,680,452	Shanton	10-1997

**(10) *Grounds of Rejection to be Reviewed on Appeal***

The following ground(s) of rejection are applicable to the appealed claims:

**Claim 1** is rejected under 35 U.S.C. 103(a) as being unpatentable over Proust et al. (6,216,014 B1) in view of Jennings, III (6,134,631 A).

**As per claim 1** Proust et al. (6,216,014 B1) teach a system of managing the security of data processing applications (see col.3, lines 37-40 where a system of managing of applications by secure means is disclosed), comprising:

Directory in which the data processing applications are stored (see col.12, lines 46-67 where directory files such as master file or root directory and sub-directories stores application files such as loyalty application, payment applications), said directories being organized in an n-level tree (see col.12, lines 46-52 where the directories are structured as three level hierarchical structure, that is corresponds to Applicant's n-level tree structure as a hierarchical structure); and

A number of security registers, which are selectively allocatable to any one of a plurality of said directories, each security register containing all rights or secrets which have been granted under the directory to which it has been allocated (see col.13, lines 36-55 which relates to fig.5 flowchart, step 57 disclose having reference secret and a message authentication mode which relate to the related file and under a directory as disclosed above in col.12, lines 46-67; therefore rights that corresponds to message authentication mode that verify the access control policy to be used for the related file which itself relates to transmitted remote application; and on the other hand secrets such as reference secret related to corresponding file that itself relates to remote application; further col.14, lines 6-9 and 28-47 disclose data storage holds a secret reference, a security scheme and authentication mode and their storage in the data storage and how the pointer points to the location of the storage; examiner considers location of the storage where the identifier points to as corresponding to the security register that holds the message that contains reference secret or rights)

but do not disclose that security registers or particular location of the memory that corresponds to a security registers is allocated to and it is under a directory. However Jennings, III (6,134,631 A) teach an slave device that being treated as a hierarchical memory system that security registers or particular location of the memory that corresponds to a security registers is allocated to and it is under a directory (see col. 3, lines 29-33 where it disclose memory systems is hierarchical able to retrieve files within a stored directory). It would have been obvious to one of ordinary skilled in the art at the time the invention was made to utilize Jennings, III (6,134,631 A) allocation of security register or a memory location under a single directory in Proust et al. (6,216,014 B1)'s hierarchical file management security system of processing applications in order to provide additional performance for demanding applications while adding little additional hardware by utilizing the slave device as hierarchical memory system on which to retrieve and store files that are stored under a directory.

**Claims 2 and 4** are rejected under 35 U.S.C. 103(a) as being unpatentable over Proust et al. (6,216,014 B1) in view of Jennings, III (6,134,631 A), and further in view of Shanton (5, 680,452 A).

**As per claim 2** Proust et al. (6,216,014 B1) teach a method of managing the security of data processing applications, comprising the steps of:

selecting one of a plurality of directories that are organized in an n-level hierarchy (see col.12, lines 46-52 where the directories are structured as three level hierarchical structure, that is corresponds to Applicant's n-level tree structure as a hierarchical structure);

storing in an allocated security register rights granted under the directory to which said register has been allocated, according to given rules (see col.13, lines 36-55 which relates to fig.5 flowchart, step 57 disclose having reference secret and a message authentication mode which relate to the related file and under a directory as disclosed above in col.12, lines 46-67; therefore rights that corresponds to message authentication mode that verify the access control policy to be used for the related file which itself relates to transmitted remote application are corresponding to given rules; and on the other hand secrets such as reference secret related to corresponding file that itself relates to remote application; further col.14, lines 6-9 and 28-47 disclose data storage holds a secret reference, a security scheme (given rule) and authentication mode (authentication rule) and their storage in the data storage and how the pointer points to the location of the storage; examiner considers location of the storage where the identifier points to as corresponding to the security register that holds the message that contains reference secret or rights).

seeking the secrets presented in a directory in which a data processing applications is stored (see col.12, lines 46-52 where the directories are structured as three level hierarchical structure, that is corresponds to Applicant's n-level tree

structure as a hierarchical structure where examiner considers the root directory or master file directory represent the highest level directory or level 1 directory as a root directory where other subdirectories are under such directory; and see col.12, lines 46-67 where directory files such as master file or root directory and sub-directories stores application files such as loyalty application, payment applications); and

(c) verifying the knowledge of one or more rights at the level of the data processing application (see fig.6-9 where knowledge of one or more rights such as security scheme of application or security attributes or secret reference or authorization mode is verified in relation with one another; col.12, lines 58-61 where a right of access to Loyalty remote applications is verified by verifying access condition "private") **but do not disclose explicitly** that security registers or particular location of the memory that corresponds to a security registers is allocated to and it is under a directory.

However Jennings, III (6,134,631 A) teach an slave device that being treated as a hierarchical memory system that security registers or particular location of the memory that corresponds to a security registers is allocated to and it is under a single directory (see col. 3, lines 29-33 where it disclose memory systems is hierarchical able to retrieve files within a stored directory and therefore any retrieval of files from any location that corresponds to security register in the memory is under a directory). It would have been obvious to one of ordinary



skilled in the art at the time the invention was made to utilize Jennings, III (6,134,631 A) allocation of security register or a memory location under a single directory in Proust et al. (6,216,014 B1)'s hierarchical file management security system of processing applications in order to provide additional performance for demanding applications while adding little additional hardware by utilizing the slave device as hierarchical memory system on which to retrieve and store files that are stored under a directory.

Proust et al. (6,216,014 B1) in view of Jennings, III (6,134,631 A) however do not explicitly disclose dynamic allocation with respect to directories and their corresponding registers. On the other hand Shanton (5, 680,452 A) disclose analogous art having hierarchy access system for the user of the system (see col.3, lines 62-65), where objects can be dynamic (see col.4, lines 38-41) where such objects can be container files, a directory, a collection of directories, a hard disk (see col.4, lines 43-52) and where such objects such as directories and file container that corresponds to Applicant's registers have inherent features that can change dynamically "on the fly" during the operation on the object (see col.4, lines 34-39); and selection is being done on the dynamic objects (see col.6, lines 7-40 where such dynamic inherency of the objects create a memory saving during the selection and operation of the object in harmony with Applicant's invention goal). Therefore it would have been obvious to one of ordinary skilled in the art at the time the invention was made to utilize Shanton's dynamic selection

of registers such as file container in Proust's hierarchical file management security system in view of Jennings, III (6,134,631 A) allocation of security register or a memory location under a single directory in order to provide a system in which objects may be embedded within other objects, resulting in an access hierarchy for users of the system (col.3, lines 62-65).

**As per claim 4** Proust et al. (6,216,014 B1) teach a method according to claim 2 wherein said seeking step is performed according to the following rule: verifying that the secret presented is known in the current directory (Ni) or in a directory at a higher level of the hierarchy (see col.8, lines 1-24 where upon authentication of access value such as "private access" or "shared access" that corresponds to verification of a secret presented in a master file or file under master file where the master file corresponds to root directory and files under it corresponds to sub-directories access is permitted and therefore upon authentication secret known in a subdirectory or files under the master files that corresponds to directory Ni or its higher directory that corresponds to master file which itself corresponds to higher directory is verified).

**(11) Response to Arguments**

- a) Applicant's arguments with respect to the rejections under 35 U.S.C. 112 are persuasive and the rejections of claims 1, 2 and 4 have been withdrawn.

b) As per Applicant's arguments with respect to the rejection of claim 1, 2 and 4 under 35 U.S.C. 103(a) Examiner would like to emphasize on the following remarks:

- Examiner have considered location of the storage where the identifier points to (see claim 1 rejection above) as corresponding to the Applicant's security register that holds the message that contains reference secret or rights.
- Examiner further has considered pointer to point to the location of the storage corresponds to Applicant's "selectively allocatable". That is the pointer is the tool for selection of particular location or address in the storage which itself corresponds to applicant's security registers where "security registers" by itself is nothing more than a location within a storage (hard disk, memory, etc..).

Therefore based on the above definitions, which has been disclosed to the applicant in the previous office actions and the advisory, the rejection of claims 1, 2 and 4 above have been rendered.

- Also per Applicant's arguments on page 6 of the appeal brief that "the office action relies upon the Proust patent at col.14, lines 6-9 and 28-47...fig.6 and 7...", examiner emphasize on col.13, lines 36-55 which relates to fig.5 flowchart, step 57 disclose having reference secret and a message authentication mode which relate to the related file and under a

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directory as disclosed above in col.12, lines 46-67 as disclosed in the above rejections in addition to other columns in the references..

- Examiner would like to also emphasize on his response in the advisory addressing applicant's arguments that relates to the same rejections.

**Conclusion:**

Claims 1, 2 and 4 stand rejected.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

Kambiz Zand  
Primary Examiner  
Art Unit 2132



Kambiz Zand  
January 13, 2006

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